

THREE-DIMENSIONAL SWITCH PROVIDING PACKET ROUTING BETWEEN MULTIPLE MULTIMEDIA BUSES

A method and data network for routing data packets is described. Switches are connected
5 in a three-dimensional architecture (11) to form a switching fabric providing horizontal
data routing according to addresses and vertical data routing according to packet types.
An allocation procedure is then executed to manage the bandwidth resources of said
fabric, resulting with assigning routing tables at the switches and portals prior to
forwarding the packets to the switch fabric, a hop-by-hop packet flow is then executed
10 through said switches of said switch fabric. Packet flow is controlled by an output port
having an output port state machine and an output port concentrator.[Fig. 1]